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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,968	01/30/2004	Tzvi Avnery	2251.2013-001	4558
21005 7590 04/02/2008 HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133				
EXAMINER				
MAYEKAR, KISHOR				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
04/02/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/768,968

Applicant(s)

AVNERY ET AL.

Examiner

Kishor Mayekar

Art Unit

1795

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 24-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 10-23 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-9 is/are rejected.
- 7) ☐ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1 and 2 stand rejected under 35 U.S.C. 102(e) as being anticipated by WO 02/26378 A1, for reasons as of record.
3. Claims 1-3, 9 and 19-21 stand rejected under 35 U.S.C. 102(b) as being anticipated by Etievant et al. (US 6,245,309 B1), for reasons as of record.
4. Claims 6-8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over either WO '378 or Etievant '309, for reasons as of record.

Allowable Subject Matter

5. Amended claims 10-19-23 are allowed.

6. The following is an examiner's statement of reasons for allowance: Because the amendment to independent claims 10 and 19 and the remarks filed on 2 January 2008, the previous rejections to claims 10-18 and 19-23 are no longer maintained.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: Because the remarks filed on 2 January 2008, the previous rejections with respect to claims 4 and 5 are no longer maintained.

Response to Arguments

9. Applicant's arguments filed 2 January 2008 have been fully considered but they are persuasive.

Applicant argues that in WO '738 there no forces applied to the H_2 and C_2H_2 or S within the reactor 14 to separate the H_2 and C_2H_2 or S from each other to different regions of the reactor 14 and WO '378 does not teach or suggest "a separation arrangement for separating the larger and smaller constituent components within the radiation chamber by forcing the larger and smaller constituent components toward different regions of the irradiation chamber". This is found not persuasive since WO '378 discloses in either Fig. 1 or Fig. 2 that the use of reactor walls 16 results in the continuous removal of H_2 at the middle section of the irradiation chamber and the removal C_2H_2 or S at the end of the irradiation chamber. As such, WO '378 discloses the forcing of H_2 and C_2H_2 or S toward different regions of the irradiation chamber.

Applicant argues that in Etievant there no separation within the irradiation as claimed and Etievant does not teach or suggest "a separation arrangement for separating the larger and smaller constituent components within the radiation chamber by forcing the larger and smaller constituent components toward different regions of the irradiation chamber". This also found not persuasive since the irradiation chamber is surrounded by the hydrogen-permeable membrane, the inside wall of the membrane adjacent to the irradiation chamber is part of the irradiation chamber and is within the irradiation chamber.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kishor Mayekar/
Primary Examiner, Art Unit 1795